

## IN THE CLAIMS

All pending claims are reproduced below. Please amend claims 48, 55, 65 and 74 as indicated herein.

1-47. (Canceled)

48. (Currently Amended) A system for applying version control to an associative array comprising:

a first computer including a first version of the associative array stored in a first memory in communication with a processor included in the first computer, wherein the first version of the associative array comprises a first key/value pair;

a second computer including a second version of the associative array stored in a second memory in communication with a processor included in the second computer, wherein the second version of the associative array comprises a second key/value pair; and

a version controller, adapted to communicate with the first computer and the second computer, the version controller for generating a third version of the associative array by merging modifications from the first version of the associative array and the second version of the associative array and resolving a plurality of conflicts between the first version of the associative array and the second version of the associative array by receiving a plurality of different user inputs responsive to identifying the plurality of conflicts, each individual user input specifying a conflict resolution procedure for an individual conflict, and storing the third version of the associative array in a memory.

49. (Previously Presented) The system of claim 48, wherein the version controller further generates a directed acyclic graph, wherein the directed acyclic graph identifies a modification to the associative array by the first version of the associative array and a modification to the associative array by the second version of the associative array.
50. (Previously Presented) The system of claim 49, wherein the version controller further merges the first version of the associative array and the second version of the associative array to generate the third version of the associative array.
51. (Previously Presented) The system of claim 49, wherein the version controller further generates a changeset including modifications to the associative array by the first version of the associative array and the second version of the associative array.
52. (Previously Presented) The system of claim 49, wherein the version controller further executes at least one version control operation from a group of: creating the associative array, checking out the associative array, checking in the associative array, generating a report, cloning the associative array to generate a cloned associative array and displaying differences between the first version of the associative array and the second version of the associative array.
53. (Previously Presented) The system of claim 48, wherein the associative array comprises a file including:  
a key; and  
a value associated with the key.
54. (Previously Presented) The system of claim 48, wherein the version controller further organizes a plurality of associative arrays as a database table.

55. (Currently Amended) A method for implementing version control on an associative array comprising:

generating a first version of the associative array by modifying a first key/value pair,

wherein the first version of the associative array is a derivative of the associative array which is stored in a first memory in communication with a first processor;

generating a second version of the associative array by modifying a second key/value pair, wherein the second version of the associative array is a derivative of the

associative array which is stored in a first memory in communication with a first processor; and

generating a third version of the associative array by merging modifications from the first

version of the associative array and the second version of the associative array

and resolving a plurality of conflicts between the first version of the associative array and the second version of the associative array by receiving a plurality of

different user inputs responsive to identifying the plurality of conflicts, each

individual user input specifying a conflict resolution procedure for an individual conflict; and

storing the third version of the associative array in a memory in communication with a processor.

56. (Previously Presented) The method of claim 55, wherein generating the third version of the associative array comprises:

generating a first changeset identifying the modifications to the associative array in the first version of the associative array;

generating a second changeset identifying the modifications to the associative array in the second version of the associative array; and  
applying the modifications identified by the first changeset and the second changeset to a copy of the associative array.

57. (Previously Presented) The method of claim 55, further comprising:  
generating a directed acyclic graph, the directed acyclic graph identifying a difference between the third version of the associative array and the associative array.
58. (Previously Presented) The method of claim 57, wherein the directed acyclic graph identifies the modification to the associative array by the first version of the associative array and the modification to the associative array by the second version of the associative array.
59. (Previously Presented) The method of claim 56, further comprising:  
comparing key/value pairs in the first version of the associative array, the second version of the associative array and the associative array; and  
responsive to conflicts in the comparison of key/value pairs, prompting a user to specify a value for a conflicting key/value pair.
60. (Previously Presented) The method of claim 55, further comprising:  
displaying the third version of the associative array as a database record.
61. (Previously Presented) The method of claim 60, further comprising:  
displaying a plurality of modified associative arrays as a database table.
62. (Previously Presented) The method of claim 57, further comprising:

generating a report including the third version of the associative array and data or metadata describing at least one of the directed acyclic graph, the merged modification and the conflicts.

63. (Previously Presented) The method of claim 56, further comprising:  
selecting a conflict;  
applying an algorithm having knowledge of the data in the associative array; and  
modifying the third version of the associative array responsive to a result of the applied algorithm.
64. (Previously Presented) The method of claim 56, further comprising:  
selecting a key/value pair having conflicting values in the first version of the associative array and the second version of the associative array;  
evaluating historical values of the selected conflicting key/value pair; and  
modifying the selected key/value pair responsive to the evaluation.
65. (Currently Amended) An apparatus for applying version control to an associative array comprising:  
a data store including the associative array, the associative array comprising a file including at least one key/value pair, a first version of the associative array having a first key/value pair and a second version of the associative array having a second key/value pair; and  
a version controller adapted to communicate with the data store, the version controller for generating a third version of the associative array by merging modifications from the first version of the associative array and the second version of the associative array and resolving a plurality of conflicts between the first version of the

associative array and the second version of the associative array by receiving a plurality of different user inputs responsive to identifying the plurality of conflicts, each individual user input specifying a conflict resolution procedure for an individual conflict, the version controller further storing the third version of the associative array in a memory in communication with a processor.

66. (Previously Presented) The apparatus of claim 65, wherein the version controller further generates a directed acyclic graph, wherein the directed acyclic graph identifies a modification to the associative array by the first version of the associative array and a modification to the associative array by the second version of the associative array.
67. (Previously Presented) The apparatus of claim 65, further comprising:  
a communication module for connecting the version controller to a computer network  
and receiving a fourth version of the associative array including a modified  
key/value pair.
68. (Previously Presented) The apparatus of claim 67, wherein the version controller further generates a fifth version of the associative array by merging modifications from the fourth version of the associative array with the third version of the associative array.
69. (Previously Presented) The apparatus of claim 67, wherein the version controller further resolves a conflict between the fourth version of the associative array and at least one from the group of the first version of the associative array, the second version of the associative array and the third version of the associative array.
70. (Previously Presented) The apparatus of claim 65, wherein the version controller further organizes a plurality of associative arrays as a database table.

71. (Previously Presented) The apparatus of claim 65, wherein the associative array comprises a file including:
- a key; and
- a value.
72. (Previously Presented) The apparatus of claim 65, wherein the associative array comprises an XML file including a key and a value associated with the key.
73. (Previously Presented) The apparatus of claim 65, wherein the data store further includes a specification file defining at least one of a default value associated with a key and a constraint on a value associated with a key.
74. (Currently Amended) A computer program product, comprising a computer readable medium storing computer executable code for implementing version control on an associative array, the computer executable code performing the steps of:
- generating a first version of the associative array by modifying a first key/value pair,
- wherein the first version of the associative array is a derivative of the associative array;
- generating a second version of the associative array by modifying a second key/value pair, wherein the second version of the associative array is a derivative of the associative array; and
- generating a third version of the associative array by merging modifications from the first version of the associative array and the second version of the associative array and by resolving a plurality of conflicts between the first version of the associative array and the second version of the associative array by receiving a plurality of different user inputs responsive to identifying the plurality of

conflicts, each individual user input specifying a conflict resolution procedure for an individual conflict; and  
storing the third version of the associative array in a memory in communication with a processor.

75. (Previously Presented) The computer program product of claim 74, wherein generating the third version of the associative array comprises:  
generating a first changeset identifying modifications to the associative array in the first version of the associative array;  
generating a second changeset identifying modifications to the associative array in the second version of the associative array; and  
applying the modifications identified by the first changeset and the second changeset to a copy of the associative array.
76. (Previously Presented) The computer program product of claim 74, wherein the computer executable code further performs the step of:  
generating a directed acyclic graph, the directed acyclic graph identifying a difference between the third version of the associative array and the associative array.
77. (Previously Presented) The computer program product of claim 76, wherein the directed acyclic graph identifies a modification to the associative array by the first version of the associative array and a modification to the associative array by the second version of the associative array.
78. (Previously Presented) The computer program product of claim 74, wherein resolving a plurality of conflicts between the first version of the associative array and the second version of the associative array further comprises:



comparing key/value pairs in the first version of the associative array, the second version of the associative array and the associative array; and responsive to a conflict in the comparison of key/value pairs, prompting a user to specify a value for a conflicting key/value pair associated with the conflict.

79. (Previously Presented) The computer program product of claim 74, wherein the computer executable code further performs the step of:  
displaying the third version of the associative array as a database record.
80. (Previously Presented) The computer program product of claim 79, wherein the computer executable code further performs the step of:  
displaying a plurality of associative arrays as a database table.
81. (Previously Presented) The computer program product of claim 76, wherein the computer executable code further performs the step of:  
generating a report including the third version of the associative array and data or metadata describing at least one of the directed acyclic graph, the merged changes and the conflicts.
82. (Previously Presented) The computer program product of claim 75, wherein the computer executable code further performs the steps of:  
selecting a key/value pair having conflicting values in the first version of the associative array and the second version of the associative array;  
prompting a user to input a value for the selected key/value pair; and  
associating the user input value with the selected key/value pair.
83. (Previously Presented) The computer program product of claim 75, wherein the computer executable code further performs the steps of:

selecting a key/value pair having conflicting values in the first version of the associative array and the second version of the associative array;  
evaluating historical values of the selected conflicting key/value pair; and  
modifying the selected key/value pair responsive to the evaluation.

84. (Previously Presented) The method of claim 55, wherein generating the third version of the associative array comprises:

merging a modification to the first key/value pair by the first version of the associative array and a second modification to the first key/value pair by the second version of the associative array.